

## BENEFIT FORMULAS

A PRESENTATION TO THE UNITED STATES SENATE  
COMMITTEE ON GOVERNMENTAL AFFAIRS  
SUBCOMMITTEE ON CIVIL SERVICE, POST OFFICE, AND GENERAL SERVICES

POLICY FORUM  
ON  
PROGRAM OPTIONS  
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THERE ARE TWO BASIC METHODS OF PROVIDING FOR RETIREMENT INCOME, EITHER THROUGH APPLICATION OF A BENEFIT FORMULA IN A DEFINED BENEFIT PLAN, OR THROUGH AN ACCUMULATION OF MONIES IN A DEFINED CONTRIBUTION PLAN. THE MOST COMPREHENSIVE DEFINITION OF A BENEFIT FORMULA APPLIES WHEN DISCUSSING DEFINED BENEFIT PLANS, AND IT MUST INCLUDE SPECIFIC ANSWERS TO THE FOLLOWING QUESTIONS: HOW MUCH THE BENEFIT IS TO BE, WHEN IT IS TO BE PAID, AND HOW IT IS TO BE PAID. IN OTHER WORDS, THE BENEFIT FORMULA WILL DEFINE THE BENEFIT ACCRUAL RATE, THE NORMAL RETIREMENT AGE, AND THE FORM OF PAYMENT, E.G. A LIFE ANNUITY, A JOINT AND SURVIVOR ANNUITY OR PERHAPS A LUMP SUM.

I'VE BEEN ASKED TO CONCENTRATE MY REMARKS TODAY PRIMARILY ON THAT PORTION OF THIS DEFINITION DEALING WITH THE ACCRUAL RATE. THEREFORE I'LL BE DISCUSSING VARIOUS BENEFIT FORMULAS, WITH REGARD TO THE COMPENSATION BASE USED, PATTERNS OF BENEFIT ACCRUAL (INCLUDING FRONT-LOADING AND BACK-LOADING) AND SOCIAL SECURITY INTEGRATION FORMULAS. I'LL ALSO TRY TO FOCUS ON HOW EACH OF THESE AFFECTS A DEFINED BENEFIT PLAN AND A DEFINED CONTRIBUTION PLAN. I PLAN TO COVER DEFINED BENEFIT PLANS FIRST.

BEFORE I GET TO ACCRUAL RATES, HOWEVER, I DO WANT TO ADDRESS BRIEFLY THE RETIREMENT AGE AND FORM OF PAYMENT. IN THE CORPORATE WORLD, AGE 65 IS ALMOST UNIVERSALLY THE NORMAL RETIREMENT AGE SPECIFIED IN THE PLAN. HOWEVER, AN IMPORTANT ELEMENT OF THE BENEFIT FORMULA RELATED TO THE RETIREMENT AGE IS THE EARLY RETIREMENT PROVISION; IN OTHER WORDS, SOME EMPLOYERS ENCOURAGE EARLY RETIREMENT BY PERMITTING EMPLOYEES TO RETIRE EARLIER THAN THE NORMAL RETIREMENT AGE WITH LESS THAN A FULL ACTUARIAL REDUCTION IN THE BENEFIT. THIS IS

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KNOWN AS SUBSIDIZED EARLY RETIREMENT AND CERTAINLY INCREASES THE COST OF THE PLAN. IN MANY CORPORATE PLANS, AND CERTAINLY IN MOST OF THE VERY LARGE PLANS, RETIREMENT AT AGE 62 WITH FULL UNREDUCED BENEFITS IS NOT UNCOMMON, AND IN THESE SITUATIONS, AGE 62 CAN GENERALLY BE CONSIDERED THE DE FACTO NORMAL RETIREMENT AGE. I SHOULD ALSO NOTE THAT THERE ARE A NUMBER OF PLANS IN PRIVATE INDUSTRY WHERE AN EMPLOYEE MAY RETIRE WITH FULL UNREDUCED BENEFITS DEPENDING ON COMBINATIONS OF SERVICE AND AGE, E.G. AGE 60 WITH 20 YEARS OF SERVICE OR AGE 55 WITH 30 YEARS OF SERVICE, ETC., SIMILAR TO THE CURRENT CIVIL SERVICE RETIREMENT SYSTEM. DEFERRED RETIREMENT MAY OR MAY NOT PROVIDE FOR A CONTINUATION OF BENEFIT ACCRUALS AND THIS IN TURN CAN AFFECT THE COST OF THE PLAN, ALTHOUGH DEFERRED RETIREMENT GENERALLY REDUCES THE COST OF THE PLAN.

FINALLY, JUST A WORD ON THE FORM OF PAYMENT OF THE BENEFIT, I.E., THE WAY IN WHICH IT WILL BE PAID. IN PRIVATE INDUSTRY NON-CONTRIBUTORY PLANS THE NORMAL FORM IS A LIFE ANNUITY. MOST PLANS ALSO OFFER THE EMPLOYEE THE SELECTION OF SEVERAL OTHER OPTIONS SUCH AS LIFE AND 10 YEAR CERTAIN OR JOINT AND 50% SURVIVOR, ETC. EACH OF THESE FORMS IS CALCULATED AS AN ACTUARIAL EQUIVALENT TO THE LIFE ANNUITY. FOR EXAMPLE, IF AN EMPLOYEE WAS SCHEDULED TO RECEIVE \$100 A MONTH AT AGE 65 AS A LIFE ANNUITY, AND INSTEAD ELECTED TO RECEIVE A 10 YEAR CERTAIN AND LIFE THEREAFTER ANNUITY THE BENEFIT WOULD THEN BE REDUCED TO \$91 PER MONTH. IN OTHER WORDS, THIS LOWER DOLLAR AMOUNT, WHICH IS EFFECTIVELY GUARANTEED FOR AT LEAST 10 YEARS AND THEN FOR LIFE THEREAFTER IS ACTUARIALY EQUIVALENT TO \$100 A MONTH PAYABLE FOR LIFE.

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A COROLLARY TO THE FORM OF PAYMENT MIGHT ALSO BE WHETHER SUCH PAYMENT IS TO BE CONSTANT IN AMOUNT, OR WILL INCREASE IN AMOUNT OVER TIME TO RECOGNIZE COST OF LIVING INCREASES. VERY FEW PRIVATE PLANS AUTOMATICALLY INCREASE PAYMENTS TO RETIREES; INSTEAD UTILIZING OCCASIONAL AD HOC INCREASES, BUT EVEN HERE, RARELY IF EVER IS THE FULL IMPACT OF COST OF LIVING RECOGNIZED. THE CIVIL SERVICE RETIREMENT SYSTEM NORMAL FORM OF BENEFIT (UNLIKE THE OVERWHELMING MAJORITY OF PRIVATE PLANS) IS INDEXED TO THE COST OF LIVING, AND THIS HAS A SIGNIFICANT COST IMPACT.

I DO NOT WANT TO SPEND ANY MORE TIME THIS MORNING ON THESE LATTER TWO BENEFIT FORMULA DETERMINANTS, BUT I DID WANT TO AT LEAST NOTE THEIR IMPACT ON THE COST. IN THE FIRST POLICY FORUM THERE WAS AN EXCELLENT PAPER PRESENTED BY DR. DAN MCGILL, WHICH GOES INTO CONSIDERABLE DETAIL ON THE IMPACT ON COST OF BOTH THE NORMAL RETIREMENT AGE AND THE NORMAL FORM OF ANNUITY. I WOULD REFER ANYONE DESIRING MORE INFORMATION TO HIS PAPER. IN ADDITION, OF COURSE, THIS MORNING THE NEXT SPEAKER IS GOING TO DISCUSS THE TOPIC OF RETIREMENT AGES. SO ENOUGH FOR NOW ON THESE TWO IMPORTANT ASPECTS OF BENEFIT FORMULAS.

ALTHOUGH THE PAST FOUR POLICY FORUMS HAVE COVERED, IN ONE WAY OR ANOTHER, MOST OF THE TOPICS ABOUT WHICH YOU'LL BE HEARING TODAY, THE COMMITTEE STAFF FELT IT WOULD BE USEFUL IF WE WERE TO DEVOTE THIS FINAL FORUM TO ADDRESSING SOME OF THE MAJOR ASPECTS OF PLAN DESIGN, IN ORDER THAT YOU OBTAIN SOME FEEL OF HOW EACH OF THESE ASPECTS AFFECTS THE AMOUNT OF BENEFITS AND/OR THE COST OF SUCH BENEFITS.

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AS CONSULTANTS, ONE OF THE WAYS IN WHICH WE SEEK TO ASSIST EMPLOYERS IN PENSION PLAN DESIGN IS TO HELP THEM ASCERTAIN WHAT THE RETIREMENT INCOME OBJECTIVE OF THEIR PLAN SHOULD BE. IN BROAD TERMS, THIS GENERALLY IS EXPRESSED AS THE AMOUNT OF INCOME THAT IS ADEQUATE TO MAINTAIN THE RETIRED WORKER AND HIS DEPENDENTS ON A STANDARD OF LIVING REASONABLY CONSISTENT WITH THAT WHICH THEY ENJOYED DURING THEIR PRE-RETIREMENT YEARS. THIS NORMALLY TAKES ACCOUNT OF THE COMBINED BENEFITS PAYABLE FROM THE PRIVATE PENSION PLAN AND PAYABLE FROM SOCIAL SECURITY TO THE INDIVIDUAL.

IF YOU WILL RECALL, ONE PORTION OF THE FIRST POLICY FORUM DEALT ENTIRELY WITH THE TOPIC OF WHAT IS KNOWN AS REPLACEMENT RATIOS, I.E. THE PERCENTAGE OF RETIREMENT BENEFITS, INCLUDING SOCIAL SECURITY, AS COMPARED TO THE PRE-RETIREMENT INCOME. REPLACEMENT RATIOS ARE GENERALLY LESS THAN 100%, FOR FAIRLY OBVIOUS REASONS, SUCH AS:

1. TAXES OF THE RETIRED EMPLOYEE ARE LESS THAN THOSE OF AN ACTIVE EMPLOYEE.
2. CERTAIN EXPENSES ASSOCIATED WITH EMPLOYMENT NO LONGER EXIST (COMMUTING, CLOTHES, MEALS AWAY FROM HOME, ETC.).
3. THE COST OF SUPPORTING CHILDREN HAS GENERALLY CEASED.
4. MORTGAGE PAYMENTS HAVE GENERALLY CEASED.

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THEREFORE, TYPICAL REPLACEMENT RATIO OBJECTIVES IN CORPORATE PLANS RANGE FROM ABOUT 50%-60% FOR HIGHER PAID EMPLOYEES UP TO ABOUT 70%-80% FOR LOWER PAID EMPLOYEES. .

IN ADDITION, I SHOULD NOTE THAT THESE REPLACEMENT RATIOS ARE GENERALLY TARGETED TOWARD A "FULL SERVICE" EMPLOYEE, I.E. ONE WHO HAS RENDERED 30 OR PERHAPS 40 YEARS OF SERVICE WITH ONE EMPLOYER.

IN COMPARISON, THE CIVIL SERVICE RETIREMENT SYSTEM PROVIDES THE SAME REPLACEMENT RATIO FOR A LOW PAID OR A HIGH PAID EMPLOYEE IF EACH HAS THE SAME LENGTH OF SERVICE.

YOU WILL NOTE THAT IN COMPUTING REPLACEMENT RATIOS, THE INDIVIDUAL'S PERSONAL SAVINGS ARE GENERALLY NOT TAKEN INTO ACCOUNT. MOST OF US NEED ONLY LOOK AT OUR OWN PERSONAL CUMULATIVE SAVINGS TO UNDERSTAND WHY THIS IS SO. BRIEFLY, ONE'S PERSONAL SAVINGS WOULD NORMALLY NOT PROVIDE A VERY SUBSTANTIAL AMOUNT OF RETIREMENT INCOME WHEN CONVERTED INTO AN ANNUITY STREAM. ANY PERSONAL SAVINGS MAY SIMPLY BE THOUGHT OF AS A SUPPLEMENT TO THE RETIREMENT INCOME.

I MENTION THE REPLACEMENT RATIO IN SOME DETAIL AGAIN TODAY ONLY TO EMPHASIZE THE POINT THAT IN STARTING TO DESIGN ANY TYPE OF RETIREMENT PLAN IT IS ABSOLUTELY NECESSARY TO HAVE A GOAL, AND THAT GOAL IN THE PRIVATE SECTOR IS GENERALLY EXPRESSED EITHER AS THE BENEFIT OBJECTIVE, OR THE COST TO PROVIDE BENEFITS. OUR EMPHASIS THIS MORNING IS ON DISCUSSING BENEFIT DESIGN, BUT LET ME JUST SAY AT THE OUTSET

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THAT WHENEVER ANY ONE OF US IS DISCUSSING ONE BENEFIT WHICH IS RICHER THAN ANOTHER, KEEP IN MIND THE OBVIOUS COROLLARY THAT THE RICHER BENEFIT IS ALSO ALWAYS COSTLIER TO FUND.

NOW I BELIEVE WE'RE READY TO TURN OUR ATTENTION TO ACCRUAL RATES, AND HOW THEY CAN BE USED TO PRODUCE THE DESIRED REPLACEMENT RATIOS. THERE ARE A NUMBER OF WAYS TO APPROACH THIS TOPIC BUT LET ME CHOOSE ONE OF THE MORE TRADITIONAL ONES AND FIRST DEFINE BENEFIT FORMULAS UNDER TWO BROAD CATEGORIES: UNIT BENEFIT AND FLAT BENEFIT. WE WILL DISCUSS UNIT BENEFIT PLANS FIRST. THE NAME MEANS JUST WHAT IT SOUNDS LIKE IT MEANS. IN EACH YEAR OF SERVICE A SPECIFIC UNIT OF BENEFIT IS CREDITED TOWARDS RETIREMENT. HOWEVER, HERE AGAIN WE MUST FIRST CATEGORIZE THE UNIT OF BENEFIT AS EITHER A DOLLAR AMOUNT OR A PERCENTAGE OF PAY. WHERE IT IS A DOLLAR AMOUNT, AS IS OFTEN THE CASE IN UNION NEGOTIATED PLANS, A TYPICAL MONTHLY BENEFIT FOR EACH YEAR OF SERVICE MIGHT BE \$10. UNDER SUCH A PLAN, SOMEONE RETIRING WITH 30 YEARS OF SERVICE WOULD THEREFORE RECEIVE \$300 PER MONTH IN RETIREMENT INCOME.

WITH REGARD TO THOSE UNIT BENEFIT PLANS IN WHICH THE UNITS ARE EXPRESSED AS A PERCENTAGE OF PAY, AND ARE THEREFORE TIED TO COMPENSATION, WE IMMEDIATELY RUN INTO THREE QUESTIONS WHICH WE MUST ANSWER. THESE ARE:

1. WHAT IS THE DEFINITION OF COMPENSATION? (I.E. BASE SALARY ONLY, OR ALSO INCLUDING OVERTIME, COMMISSIONS, BONUS, ETC.).

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2. WHAT IS THE BASIS OF COMPENSATION? (CAREER AVERAGE OR FINAL AVERAGE SALARY)
3. WHAT IS THE AVERAGING PERIOD FOR COMPENSATION? (FINAL OR HIGHEST AVERAGE 3 YEARS, 5 YEARS, OR 10 YEARS).

NOTE THAT ALL THREE OF THESE QUESTIONS HAVE TO DO WITH THE FACT THAT IN DEFINING UNIT BENEFIT, WE BROUGHT IN THE WORD "PAY" AND EACH QUESTION RELATES IN SOME WAY TO PAY.

THERE REALLY IS ANOTHER QUESTION TO ASK REGARDING THE WORD "BENEFIT" AND THAT IS, "IS THE BENEFIT GOING TO BE COORDINATED, I.E., INTEGRATED WITH SOCIAL SECURITY OR NOT"? ACTUALLY, MORE SPECIFICALLY THE QUESTION SHOULD BE IS THE BENEFIT GOING TO EXPLICITLY INTEGRATE OR IMPLICITLY INTEGRATE WITH SOCIAL SECURITY. LET ME ELABORATE ON THIS LATTER POINT FOR A MOMENT. TODAY THE OVERWHELMING MAJORITY OF ALL CORPORATE PLANS TAKE ACCOUNT OF SOCIAL SECURITY IN ONE WAY OR ANOTHER. IF THE PLAN DOES NOT SPECIFICALLY TAKE ACCOUNT OF SOCIAL SECURITY IN THE BENEFIT FORMULA, BUT TAKES ACCOUNT OF IT BY PROVIDING A SOMEWHAT LOWER OVERALL BENEFIT, IT IS SAID TO RECOGNIZE SOCIAL SECURITY IMPLICITLY, OR BE IMPLICITLY INTEGRATED. VERY FEW CORPORATE PLANS ARE OF THIS TYPE. IF THE PLAN BENEFIT, ON THE OTHER HAND, SPECIFICALLY TAKES ACCOUNT OF SOCIAL SECURITY, BY EITHER OFFSETTING A PORTION OF SOCIAL SECURITY PAYMENTS DIRECTLY OR TAKING ACCOUNT OF THEM IN THE BENEFIT FORMULA WITH A LOWER PERCENTAGE APPLIED TO ONE PORTION OF PAY, AND A HIGHER

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PERCENTAGE TO ANOTHER, SUCH PLANS ARE SAID TO BE EXPLICITLY INTEGRATED WITH SOCIAL SECURITY. MORE ON THIS LATER, HOWEVER.

NOW LET'S GET BACK TO THE THREE QUESTIONS WE ASKED CONCERNING PAY. FIRST OF ALL, WE MUST DECIDE WHAT THE DEFINITION OF THE COMPENSATION BASE IS. IS THE BENEFIT TO BE BASED ONLY ON BASE SALARY, OR SHOULD THE COMPENSATION BASE INCLUDE OVERTIME, SHOULD IT INCLUDE COMMISSIONS, SHOULD IT INCLUDE BONUSES, ETC?

THE IMPORTANT THING TO KEEP IN MIND WITH REGARD TO ANY ADDITIONS TO BASE SALARY IN THE COMPENSATION BASE USED IS, DO SUCH ADDITIONS REPRESENT A CONTINUING AND REGULAR PART OF THE EMPLOYEES' COMPENSATION, AS OPPOSED TO A SPORADIC, OR OCCASIONAL INCREMENT TO BASE SALARY? IF THE INCREMENT IS CONTINUING AND REGULAR, IT PROBABLY SHOULD BE INCLUDED IN THE COMPENSATION BASE, SINCE IT WILL BE AN IMPORTANT ELEMENT IN CALCULATING A CORRECT REPLACEMENT RATIO. IF, ON THE OTHER HAND, THE INCREMENT IS SPORADIC OR OCCASIONAL, IT SHOULD NOT BE INCLUDED. (IN FACT, IF THE EMPLOYEE HAS SOME CONTROL OVER THE AMOUNT OF THE INCREMENT, AS IS OCCASIONALLY TRUE OF OVERTIME, INCLUDING THE INCREMENT CAN ACTUALLY DISTORT THE INTENDED RETIREMENT BENEFITS, AS IN THE CASE OF A FINAL 3 YEAR AVERAGE SALARY, WHERE AN EMPLOYEE GENERATES UNUSUALLY HIGH AMOUNTS OF OVERTIME DURING HIS FINAL 3 YEARS OF EMPLOYMENT, PRIMARILY TO INCREASE HIS RETIREMENT INCOME). UNDER THE CIVIL SERVICE RETIREMENT SYSTEM, THE COMPENSATION BASE IS ALMOST UNIVERSALLY BASE PAY.

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THE SECOND QUESTION WE ASKED REFERRED TO THE BASIS OF COMPENSATION, I.E. CAREER AVERAGE OR FINAL AVERAGE SALARY. CAREER AVERAGE SIMPLY MEANS THAT THE UNIT OF BENEFIT WHICH IS CREDITED DURING ANY YEAR IS BASED UPON THE EMPLOYEE'S COMPENSATION DURING THAT SPECIFIC YEAR (E.G. 1% OF ACTUAL SALARY FOR EACH YEAR OF SERVICE). YEARS AGO, MANY PLANS WERE OF THIS NATURE, BUT THE INCREASES IN THE INFLATIONARY RATE OVER INTERVENING YEARS HAVE CAUSED MOST EMPLOYERS TO MOVE TO FINAL AVERAGE SALARY PLANS, WHERE THE UNIT OF BENEFIT IS BASED UPON SOME FINAL AVERAGE SALARY, IN ORDER TO OVERCOME THE UNDESIRABLE FEATURE OF RETIREMENT BENEFITS WHICH HAD OTHERWISE ALREADY BEEN ERODED BY INFLATION BEFORE THEY EVEN BECAME PAYABLE. (THE FLIP SIDE OF THIS IS THAT CAREER AVERAGE PLANS ARE LESS EXPENSIVE THAN ARE FINAL AVERAGE PAY PLANS AND DURING THE RECENT RECESSION A FEW COMPANIES WITH FINAL AVERAGE PLANS EFFECTIVELY FROZE ACCRUED BENEFITS, AND WENT CAREER AVERAGE FOR FUTURE SERVICE, WITH THE IDEA OF PERIODIC UPDATES IN THE FUTURE...SORT OF A THROWBACK TO CAREER AVERAGE BUT NOT ALL THE WAY, IN ORDER TO REDUCE COSTS).

IF OUR PLAN IS A FINAL AVERAGE SALARY PLAN, WE NOW MUST ASK "WHAT IS THE AVERAGING PERIOD OF COMPENSATION?" IN PAST YEARS, FINAL AVERAGE SALARIED PLANS WHICH WERE DESIGNED TO KEEP THE BENEFIT RELATED TO EARNINGS IN A PERIOD PRIOR TO RETIREMENT IN AN EFFORT TO DEFEAT INFLATION, MIGHT HAVE AVERAGED COMPENSATION OVER THE FINAL 10 YEARS. AS INFLATION INCREASED IN INTENSITY, IT BECAME OBVIOUS THAT AVERAGING SALARY OVER 10 YEARS, EVEN THOUGH WORKING WITH THE FINAL 10

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YEARS, STILL CAUSED AN EROSION OF SCHEDULED BENEFITS DUE TO RAPID INFLATION. HENCE, MOST PLANS MOVED TO 5-YEAR AVERAGING. IN THE PAST 5 TO 10 YEARS, WE HAVE SEEN A NUMBER OF PLANS CHANGE TO FINAL 3-YEAR AVERAGE COMPENSATION (ALTHOUGH THE BULK OF PLANS, BY FAR, ARE STILL ON 5 YEAR AVERAGE COMPENSATION). THE CURRENT CIVIL SERVICE RETIREMENT SYSTEM IS A HIGHEST 3-YEAR AVERAGE SALARY PLAN.

JUST TO ILLUSTRATE HOW THESE THREE QUESTIONS RELATING TO PERCENTAGE OF PAY CAN AFFECT THE BENEFIT, AN EMPLOYEE WHO RETIRED AT AGE 65, AFTER 40 YEARS OF SERVICE AND WAS EARNING \$40,000 BASE PAY AT RETIREMENT WOULD HAVE A CAREER AVERAGE SALARY OF JUST UNDER \$16,000, IF YOU ASSUMED A UNIFORM 6% SALARY PROGRESSION. THIS SAME EMPLOYEE'S FINAL AVERAGE SALARY WOULD RANGE FROM SLIGHTLY OVER \$31,000 IF AVERAGED OVER THE FINAL 10 YEARS UP TO JUST UNDER \$38,000, IF AVERAGED OVER THE FINAL 3 YEARS. THESE NUMBERS WOULD ALL INCREASE PROPORTIONATELY IF TOTAL COMPENSATION WERE USED IN PLACE OF BASE PAY (SEE TABLE 1).

THE SECOND BROAD CATEGORY OF FORMULAS, AS I MENTIONED, IS FLAT BENEFIT FORMULAS, WHERE THE UNDERLYING PHILOSOPHY IS THAT ONCE SOMEONE HAS BEEN EMPLOYED A MINIMUM NUMBER OF YEARS, RETIREMENT BENEFITS SHOULD NOT BE RELATED TO YEARS OF SERVICE. TYPICALLY, THE BENEFITS MIGHT BE EXPRESSED AS, SAY, 50% OF COMPENSATION ONCE AN EMPLOYEE COMPLETES 25 YEARS OF SERVICE. BENEFITS WOULD BE REDUCED PROPORTIONATELY FOR ANY SERVICE LESS THAN 25 YEARS. INCIDENTALLY THIS TYPE OF PLAN MAY ALSO BE INTEGRATED WITH SOCIAL SECURITY, WHICH TOPIC I WILL DISCUSS LATER.

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ONE OTHER ASPECT OF THE BENEFIT FORMULA THAT I WOULD LIKE TO TOUCH ON IS THE PATTERN OF BENEFIT ACCRUALS. ALTHOUGH MOST PRIVATE PLANS HAVE THE ACCRUAL SPREAD EVENLY OVER THE SERVICE PERIOD, THIS DOES NOT HAVE TO BE. IF THE EMPLOYER DESIRES TO ENCOURAGE LONG SERVICE OR ENCOURAGE SHORT SERVICE, HE CAN ALTER THE ACCRUAL RATE ACCORDINGLY. IN THOSE INSTANCES WHERE HE MIGHT WISH TO PROVIDE EARLY RETIREMENT INCENTIVES, THE PLAN MIGHT PROVIDE A HIGHER ACCRUAL RATE FOR THE FIRST PORTION OF TOTAL SERVICE AND A LOWER PERCENTAGE FOR THE LATER PORTION OF SERVICE; FOR EXAMPLE, 2% A YEAR FOR THE FIRST 20 YEARS AND 1% PER YEAR FOR YEARS THEREAFTER, OR ALTERNATIVELY 2% PER YEAR FOR UP TO 25 YEARS OF SERVICE, AND NOTHING THEREAFTER. THESE TYPES OF FORMULAS ARE KNOWN AS FRONT-LOADED.

ON THE OTHER HAND, A PLAN WHICH ENCOURAGES LONGER SERVICE MIGHT BE BACK-LOADED. THE CIVIL SERVICE RETIREMENT SYSTEM IS OF THIS TYPE, AND PROVIDES FOR AN ANNUAL BENEFIT ACCRUAL OF 1-1/2% FOR THE FIRST 5 YEARS OF SERVICE, 1-3/4% FOR THE NEXT 5 YEARS, AND 2% FOR ALL SERVICE BEYOND THE FIRST 10 YEARS. I MIGHT JUST NOTE THAT IN ORDER TO DISCOURAGE PRIVATE EMPLOYERS FROM BACK LOADING THEIR PLANS SO EXCESSIVELY THAT THEY TILT THEM OVERWHELMINGLY IN FAVOR OF LONGER SERVICE EMPLOYEES WHO MIGHT TYPICALLY BE THE HIGHER PAID, CONGRESS, WHEN IT PASSED ERISA IN 1974, INCORPORATED SOME ACCRUAL TESTS THAT QUALIFIED PLANS MUST MEET IN ORDER TO AVOID THIS TYPE OF DISCRIMINATION. I WON'T GO INTO THESE TESTS TODAY EXCEPT TO MENTION THAT THERE ARE THREE DIFFERENT TESTS AND A PLAN MUST MEET ONE OF THOSE TESTS WITH REGARD TO BENEFIT ACCRUALS.

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I WOULD ALSO NOTE THAT SOME PRIVATE PLANS PROVIDE A MINIMUM BENEFIT IN ORDER TO ASSURE A BASIC FLOOR OF PROTECTION. WHAT ABOUT MAXIMUM BENEFITS? A NUMBER OF YEARS AGO THERE GENERALLY WERE NO MAXIMUMS PLACED ON PENSION PLANS, BUT WITH THE PASSAGE OF ERISA IN 1974, CONGRESS SPECIFIED A MAXIMUM LIMIT FOR QUALIFIED PRIVATE PLANS OF THE LESSER OF \$75,000 OR 100% OF A PARTICIPANT'S AVERAGE COMPENSATION DURING THE THREE CONSECUTIVE CALENDAR YEARS OF HIGHEST COMPENSATION. THE \$75,000 WAS TO BE ADJUSTED AUTOMATICALLY FOR THE COST-OF-LIVING, AND BY 1982, THIS MAXIMUM AMOUNT HAD RISEN TO \$136,425.

LEGISLATION DURING THAT YEAR (TEFRA, THE TAX EQUITY AND FISCAL RESPONSIBILITY ACT), IMPOSED A MAXIMUM ANNUAL BENEFIT LIMITATION OF \$90,000 ON QUALIFIED DEFINED BENEFIT PLANS UNTIL 1986, AND THE DEFICIT REDUCTION ACT OF 1984 PASSED LAST MONTH BY BOTH HOUSES OF CONGRESS HAS EXTENDED THIS FREEZE UNTIL 1988. AS YOU KNOW, THE CIVIL SERVICE RETIREMENT SYSTEM HAS A MAXIMUM BENEFIT EQUAL TO 80% OF HIGHEST 3 YEAR AVERAGE SALARY.

NOW, LET'S TURN OUR ATTENTION TO SOCIAL SECURITY INTEGRATION. THE CIVIL SERVICE RETIREMENT SYSTEM, FOR NEW FEDERAL EMPLOYEES, NOW FACES THE QUESTION OF WHETHER TO INTEGRATE IMPLICITLY OR EXPLICITLY. IMPLICIT INTEGRATION WOULD ACKNOWLEDGE THE EXISTENCE OF A SEPARATE SOCIAL SECURITY BENEFIT BY PROVIDING A LOWER BENEFIT LEVEL FOR ALL EMPLOYEES THAN THE CURRENT CIVIL SERVICE RETIREMENT SYSTEM BENEFIT LEVEL. THE ADVANTAGE OF IMPLICIT INTEGRATION IS

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THAT IT IS SIMPLE, AND EASILY UNDERSTOOD BY EMPLOYEES. THE SIGNIFICANT DISADVANTAGE IS THAT IT FAILS TO ACHIEVE APPROPRIATE REPLACEMENT RATIOS FOR ALL EMPLOYEES UNLESS, OF COURSE, MOST EMPLOYEES ARE AT THE SAME APPROXIMATE PAY LEVEL. THIS IS NOT GENERALLY TRUE IN CORPORATE PLANS, AND IS NOT TRUE IN THE CASE OF CIVIL SERVICE EMPLOYEES. THEREFORE, IT IS QUITE LIKELY THAT ANY REVISIONS WILL EXPLICITLY RECOGNIZE SOCIAL SECURITY, THAT IS, RECOGNIZE THE SOCIAL SECURITY PENSION BENEFIT IN THE CIVIL SERVICE RETIREMENT SYSTEM BENEFIT FORMULA.

THERE ARE THREE APPROACHES TO CHOOSE FROM IN EXPLICITLY INTEGRATING WITH SOCIAL SECURITY. THESE WERE DISCUSSED IN THE THIRD POLICY FORUM OF THIS SERIES IN SOME DETAIL, AND I THEREFORE WILL SIMPLY TOUCH ON THE HIGHLIGHTS HERE TODAY.

THE FIRST METHOD IS TO OFFSET THE ULTIMATE PENSION BENEFIT BY SOME PERCENTAGE OF THE AMOUNT RECEIVED FROM SOCIAL SECURITY. THE IRS HAS ISSUED FAIRLY DETAILED REGULATIONS PRESCRIBING THE MAXIMUM OFFSET PERMITTED. IN VIEW OF THESE REGULATIONS, MOST CORPORATE PLANS UTILIZING THIS APPROACH GENERALLY END UP OFFSETTING 50%-60% OF THE INDIVIDUAL'S SOCIAL SECURITY BENEFIT. THE ADVANTAGES OF OFFSET INTEGRATION ARE THAT IT IS EASILY UNDERSTOOD BY EMPLOYEES AND IT AUTOMATICALLY KEEPS PACE WITH INCREASING LEVELS OF SOCIAL SECURITY FOR SUCCESSIVE GENERATIONS OF RETIREES. THE DISADVANTAGE IS THAT THE EMPLOYEE HAS THE FEELING OF SEEING SOMETHING DEDUCTED FROM HIS PENSION THAT HE FEELS HE HAS PURCHASED (ALTHOUGH, FROM A THEORETICAL VIEWPOINT, THIS IS NOT TRUE).

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LET'S TAKE A MOMENT TO LOOK AT AN EXAMPLE OF OFFSET INTEGRATION, SINCE IT WILL SERVE TO ILLUSTRATE THE UNDERLYING CONCEPT OF ALL SOCIAL SECURITY INTEGRATION. FIRST, LET'S LOOK AGAIN AT THE BENEFITS PROVIDED BY SOCIAL SECURITY. NOTE THAT SOCIAL SECURITY WAS SPECIFICALLY DESIGNED TO REPLACE A HIGHER PERCENTAGE OF INCOME AT THE LOWER SALARY LEVELS THAN AT THE HIGHER SALARY LEVELS. TO ILLUSTRATE THIS, I'VE SHOWN REPLACEMENT RATIOS FOR A RETIREE IN 1984 RANGING FROM 50% AT \$10,000 TO 12% AT \$70,000 (SEE TABLE 2).

NOTE THAT, IN ORDER TO PROVIDE EMPLOYEES WITH APPROPRIATE REPLACEMENT RATIOS, WHICH AS I NOTED EARLIER, GENERALLY RANGE FROM 50%-80%, DEPENDING ON PRE-RETIREMENT SALARY LEVELS, AN EMPLOYER LOOKING AT THESE SOCIAL SECURITY REPLACEMENT RATIOS WOULD, IDEALLY, NOT WISH TO PROVIDE LOWER PAID EMPLOYEES WITH ANY BENEFIT, WHILE SUPPLEMENTING HIGHER PAID EMPLOYEES SOCIAL SECURITY BENEFITS TO THE EXTENT NECESSARY TO ATTAIN THE 50% REPLACEMENT RATIO OBJECTIVE, I.E., OFFSETTING 100% OF THE SOCIAL SECURITY BENEFIT. HOWEVER, SINCE SOCIAL SECURITY BENEFITS ARE FINANCED BY EQUAL EMPLOYEE AND EMPLOYER CONTRIBUTIONS, THE IRS, IN A COMPLEX REVENUE RULING, LIMITS THE PERMISSIBLE SOCIAL SECURITY OFFSET.

LET'S NEXT CONSIDER THE ACTUAL REPLACEMENT RATIOS UNDER A TYPICAL PRIVATE PLAN WHICH IS INTEGRATED WITH SOCIAL SECURITY AND ALSO COMPLIES WITH IRS REGULATIONS. NOTE THAT THIS OFFSET PLAN PROVIDES A TILT IN FAVOR OF HIGHER PAID

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EMPLOYEES TO COUNTERACT THE SOCIAL SECURITY TILT IN FAVOR OF LOWER PAID EMPLOYEES (SEE TABLE 3). HOWEVER, WHEN THIS PLAN'S BENEFITS ARE COMBINED WITH SOCIAL SECURITY BENEFITS, THE RESULTING REPLACEMENT RATIOS ARE ACTUALLY QUITE CLOSE TO THE ORIGINAL 50%-80% DESIRED REPLACEMENT RATIOS (SEE TABLE 4).

THE OTHER TWO WAYS THAT THE EMPLOYER CAN EXPLICITLY INTEGRATE PENSION BENEFITS WITH SOCIAL SECURITY BENEFITS ARE BY USING EITHER EXCESS, OR STEP RATE EXCESS INTEGRATION FORMULAS. LET'S DISCUSS THE EXCESS FORMULA BRIEFLY SINCE THE STEP RATE EXCESS FORMULA CAN THEN BE MORE EASILY EXPLAINED. EXCESS PLANS (OFTEN ALSO CALLED "PURE EXCESS" PLANS) SIMPLY PROVIDE NO PENSION BENEFITS FOR EARNINGS BELOW A CERTAIN LEVEL, KNOWN AS THE INTEGRATION LEVEL. BENEFITS ARE INSTEAD BASED ON A PERCENT OF EARNINGS ABOVE THIS INTEGRATION LEVEL. OBVIOUSLY THIS IS TO COUNTERACT THE EFFECTS OF SOCIAL SECURITY, WHICH AS DISCUSSED EARLIER, GIVES MORE CREDIT TO LOWER EARNINGS THAN TO HIGHER EARNINGS (OR IN THE PARLANCE, IS TILTED TOWARD LOWER EARNINGS). THIS LEVEL OF EARNINGS BELOW WHICH NO BENEFITS ARE PROVIDED IS KNOWN AS THE INTEGRATION LEVEL. IN THE SAME REVENUE RULING REFERRED TO EARLIER, THERE ARE RULES COVERING HOW THIS INTEGRATION LEVEL IS DETERMINED, AND THERE ARE ALSO RULES GOVERNING THE INTEGRATION PERCENTAGES THAT ARE PERMITTED. BECAUSE THE TOTAL AMOUNT OF BENEFIT PERMITTED UNDER A PURE EXCESS PLAN IS LIMITED, IT CANNOT BE USED TO ACHIEVE APPROPRIATE REPLACEMENT RATIOS FOR A GROUP WITH A BROAD SALARY DISTRIBUTION, AND IS THEREFORE NOT WIDELY FOUND IN

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CORPORATE PLANS, NOR WOULD IT BE APPROPRIATE FOR USE IN THE CIVIL SERVICE RETIREMENT SYSTEM.

THE STEP RATE EXCESS FORMULA IS REALLY NOTHING MORE THAN A VARIATION OF THE PURE EXCESS FORMULA IN THAT A CERTAIN PERCENTAGE OF BENEFIT IS GIVEN BELOW THE INTEGRATION LEVEL AND A HIGHER PERCENTAGE GIVEN ABOVE THE INTEGRATION LEVEL. THE CONCEPT HERE IS SIMILAR TO THE EXCESS PLAN, IN THAT LESSER BENEFITS ARE GIVEN TO THE LOWER PAID BECAUSE OF THE SOCIAL SECURITY TILT IN THEIR FAVOR. HOWEVER, THE TOTAL BENEFITS THAT CAN BE PROVIDED UNDER THIS TYPE OF INTEGRATION DO ENABLE IT TO BE USED IN ACHIEVING MORE APPROPRIATE REPLACEMENT RATIOS FOR GROUPS WITH BROAD SALARY DISTRIBUTIONS.

AS I MENTIONED, SINCE SOCIAL SECURITY INTEGRATION WAS DISCUSSED MORE FULLY IN THE THIRD POLICY FORUM OF THIS SERIES, I AM NOT GOING TO GO INTO ANY MORE DETAILS; HOWEVER, I WOULD SIMPLY NOTE THAT OFFSET INTEGRATION IS THE MOST EFFECTIVE APPROACH IN RECOGNIZING THE SOCIAL SECURITY TILT TOWARD LOWER PAID EMPLOYEES AND THEREFORE IS THE MOST WIDELY USED INTEGRATION APPROACH IN CORPORATE PLANS.

NOW LET ME TURN VERY BRIEFLY TO DEFINED CONTRIBUTION PLANS, SINCE THESE WERE ALSO COVERED IN SOME DETAIL IN THE FIRST POLICY FORUM. THE UNDERLYING AND EXTREMELY IMPORTANT BASIC DIFFERENCE BETWEEN DEFINED CONTRIBUTION AND DEFINED BENEFIT PLANS IS THAT UNDER A DEFINED CONTRIBUTION PLAN, THE EMPLOYER DOES NOT UNDERTAKE TO PROVIDE RETIREMENT BENEFITS

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OF ANY PRE-DETERMINED AMOUNT (AS HE DOES IN THE CASE OF DEFINED BENEFIT PLANS). INSTEAD, THE EMPLOYER'S CONTRIBUTION IS DEFINED, AS OPPOSED TO THE BENEFIT BEING DEFINED. THE EMPLOYER DOES UNDERTAKE A FIXED OR DEFINED CONTRIBUTION COMMITMENT (GENERALLY A PERCENTAGE OF SALARY) AND FUNDS, CONSISTING OF THESE CONTRIBUTIONS, ARE ALLOCATED INDIVIDUALLY TO EMPLOYEES TO ACCUMULATE AT WHATEVER INVESTMENT RETURN MIGHT ACCRUE FROM THE INVESTMENT OF THESE FUNDS.

AT RETIREMENT, THE ACCUMULATED CONTRIBUTIONS, WITH INVESTMENT RETURN, ARE MADE AVAILABLE TO THE EMPLOYEE; THIS AMOUNT MAY BE MADE AVAILABLE AS A LUMP SUM, OR APPLIED AT THE THEN-CURRENT ANNUITY PURCHASE RATES TO PROVIDE WHATEVER AMOUNT OF RETIREMENT INCOME THE LUMP SUM WILL PURCHASE. NOTE THAT IN THE DEFINED CONTRIBUTION PLAN THE TOTAL INVESTMENT RISK FALLS ON THE EMPLOYEE, AS OPPOSED TO DEFINED BENEFIT PLANS, WHERE THE EMPLOYER BEARS THE INVESTMENT RISK.

PROBABLY THE SINGLE BIGGEST DISADVANTAGE OF DEFINED CONTRIBUTION PLANS IS THAT THEY CANNOT PRODUCE AN APPROPRIATE REPLACEMENT RATIO FOR ALL EMPLOYEES, SINCE THE AMOUNT ACCUMULATED AT RETIREMENT DEPENDS ON THE PERIOD OF ACCUMULATION; HENCE, THAT AMOUNT ACCUMULATED FOR A PERSON STARTING EMPLOYMENT AT AN OLDER AGE WILL BE LESS THAN FOR A YOUNGER EMPLOYEE, ASSUMING BOTH REMAIN UNTIL RETIREMENT. ANOTHER DISADVANTAGE IS THAT IT IS DIFFICULT TO ESTIMATE THE RETIREMENT BENEFIT WITH ANY DEGREE OF PRECISION, WHICH MAKES RETIREMENT PLANNING SOMEWHAT MORE SPECULATIVE THAN WITH A DEFINED BENEFIT PLAN.

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THE BIGGEST ADVANTAGE OF DEFINED CONTRIBUTION PLANS, ASIDE FROM THEIR SIMPLICITY, IS THAT IF A PERSON CHANGES JOBS OFTEN, HE WILL LIKELY BE BETTER OFF UNDER A DEFINED CONTRIBUTION PLAN THAN UNDER A DEFINED BENEFIT PLAN SINCE VESTING GENERALLY OCCURS EARLIER IN DEFINED CONTRIBUTION PLANS. FOR EXAMPLE, CURRENTLY SOMEONE IN PRIVATE INDUSTRY COULD HAVE JOBS WITH FOUR DIFFERENT EMPLOYERS, SERVE 9 YEARS WITH EACH, AND END UP WITH NO BENEFITS IF THE VESTING WERE 100% AFTER 10 YEARS OF SERVICE IN EACH OF THOSE PLANS. THIS TYPE OF SITUATION WOULD NOT NORMALLY ARISE IF ALL EMPLOYERS HAD DEFINED CONTRIBUTION PLANS. HOWEVER, WE SHOULD KEEP IN MIND THAT WE ARE TALKING ABOUT A CIVIL SERVICE RETIREMENT PLAN WHICH IS PRIMARILY DESIGNED FOR CAREER EMPLOYEES, AND WHICH CURRENTLY VESTS 100% AFTER ONLY 5 YEARS OF SERVICE.

WITH REGARD TO SOME OF THE POINTS MENTIONED EARLIER REGARDING BENEFIT FORMULAS, AS THEY PERTAIN TO DEFINED CONTRIBUTION PLANS, LET ME SIMPLY SAY THAT YOU DON'T FIND ANY BACK-LOADING OR FRONT-LOADING IN DEFINED CONTRIBUTION PLANS, AND THE OFFSET SOCIAL SECURITY INTEGRATION APPROACH IS NOT PERMITTED; HOWEVER, BOTH THE EXCESS AND STEP RATE INTEGRATION APPROACHES ARE. AS AN EXAMPLE, THIS YEAR THE EMPLOYER CAN CONTRIBUTE ZERO BELOW, AND 5.7% ABOVE, THE INTEGRATION WAGE BASE IN A DEFINED CONTRIBUTION PLAN.

ONE OTHER DIFFERENCE IS THAT IN DEFINED CONTRIBUTION PLANS, WHEN DEFINING THE BENEFIT FORMULA, THE NORMAL RETIREMENT AGE IS OF CONSIDERABLY LESS SIGNIFICANCE THAN IN THE CASE OF A DEFINED BENEFIT PLAN.

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FINALLY, I WAS ASKED TO NOTE BRIEFLY THE EFFECT OF BENEFIT FORMULAS ON A COMBINATION OF THE TWO PLANS. IN THE PRIVATE SECTOR, BY FAR THE MAJORITY OF LARGER EMPLOYERS HAVE UTILIZED DEFINED BENEFIT PENSION PLANS AS THEIR BASIC RETIREMENT SCHEME IN ORDER TO PROVIDE THE DESIRED REPLACEMENT RATIOS FOR THEIR EMPLOYEES. THEY HAVE THEN SUPPLEMENTED THESE BASIC DEFINED BENEFIT PLANS WITH DEFINED CONTRIBUTION PLANS, GENERALLY OF THE SO-CALLED THRIFT PLAN VARIETY, WHERE THE EMPLOYER MATCHES SOME PERCENTAGE OF EMPLOYEE CONTRIBUTIONS, BOTH MADE ON A DEFINED CONTRIBUTION BASIS.

THIS APPROACH STRIKES ME AS EMINENTLY WORTHY OF FURTHER INVESTIGATION FOR CIVIL SERVICE EMPLOYEES, SINCE I DO FEEL THAT THE POSITIVE FEATURES OF A DEFINED BENEFIT PLAN, MOST SPECIFICALLY, THAT OF BEING ABLE TO DESIGN A PLAN WHICH WILL PROVIDE APPROPRIATE REPLACEMENT RATIOS IS OF PARAMOUNT IMPORTANCE IN ANY WELL-DESIGNED RETIREMENT SCHEME...AND I DO THINK CIVIL SERVICE EMPLOYEES DESERVE A WELL-DESIGNED RETIREMENT PLAN. THE ADVANTAGES OF A DEFINED CONTRIBUTION PLAN, WHICH COULD BE SUPPLEMENTAL, WOULD BE TO THEN ENCOURAGE EMPLOYEE SAVINGS, AND ALSO COULD BE CONSIDERED AS A WAY TO PROVIDE SUPPLEMENTS TO THE BASIC DEFINED BENEFIT PLAN, PERHAPS TO ACT AS A HEDGE AGAINST FUTURE INFLATION AFTER RETIREMENT...BUT THEN, COST OF LIVING ADJUSTMENTS IS ANOTHER WHOLE TOPIC AND IS THE SUBJECT OF OUR LAST SPEAKER TODAY.

AS YOU WILL NOTE FROM THE DISCUSSIONS WHICH FOLLOW ON RETIREMENT AGES, DEATH AND DISABILITY BENEFITS, VESTING, AND

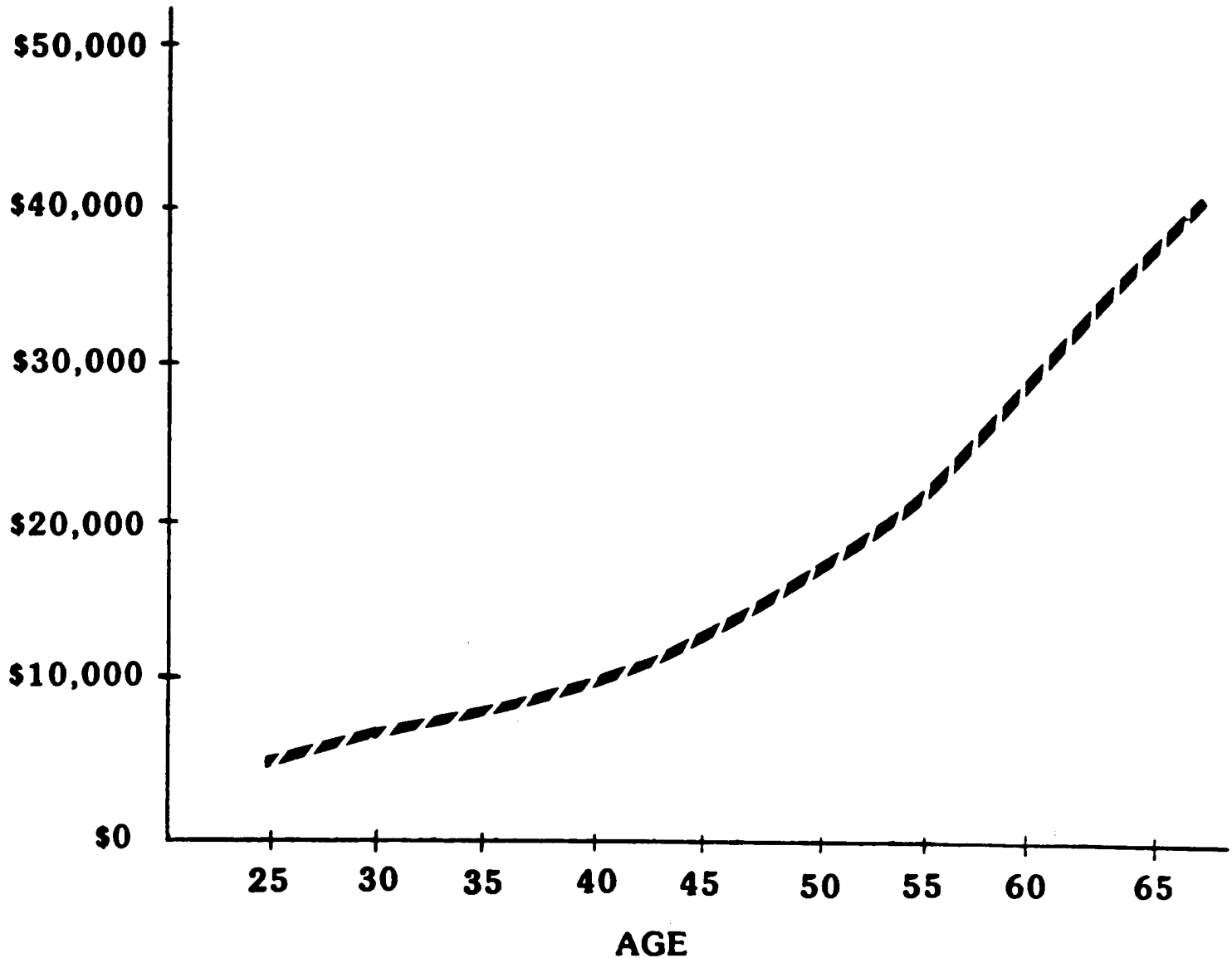
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COST OF LIVING ADJUSTMENTS, MANY OF THE VARIOUS ASPECTS OF PLAN DESIGN ARE INTERRELATED, AND DIRECTLY AFFECT THE COST.

HOPEFULLY, THIS FINAL FORUM WILL PROVIDE YOU WITH ADDITIONAL INSIGHT AS TO THE RELATIVE IMPORTANCE OF EACH OF THESE FACTORS, BOTH FROM THE BENEFIT DESIGN ASPECT, AND AS WELL WITH REGARD TO THEIR ULTIMATE IMPACT ON PLAN COSTS.

**EMPLOYEE HIRED AT AGE 25  
RETIREES AT AGE 65  
EARNING \$40,000 SALARY**



**CAREER AVERAGE SALARY      \$15,949**

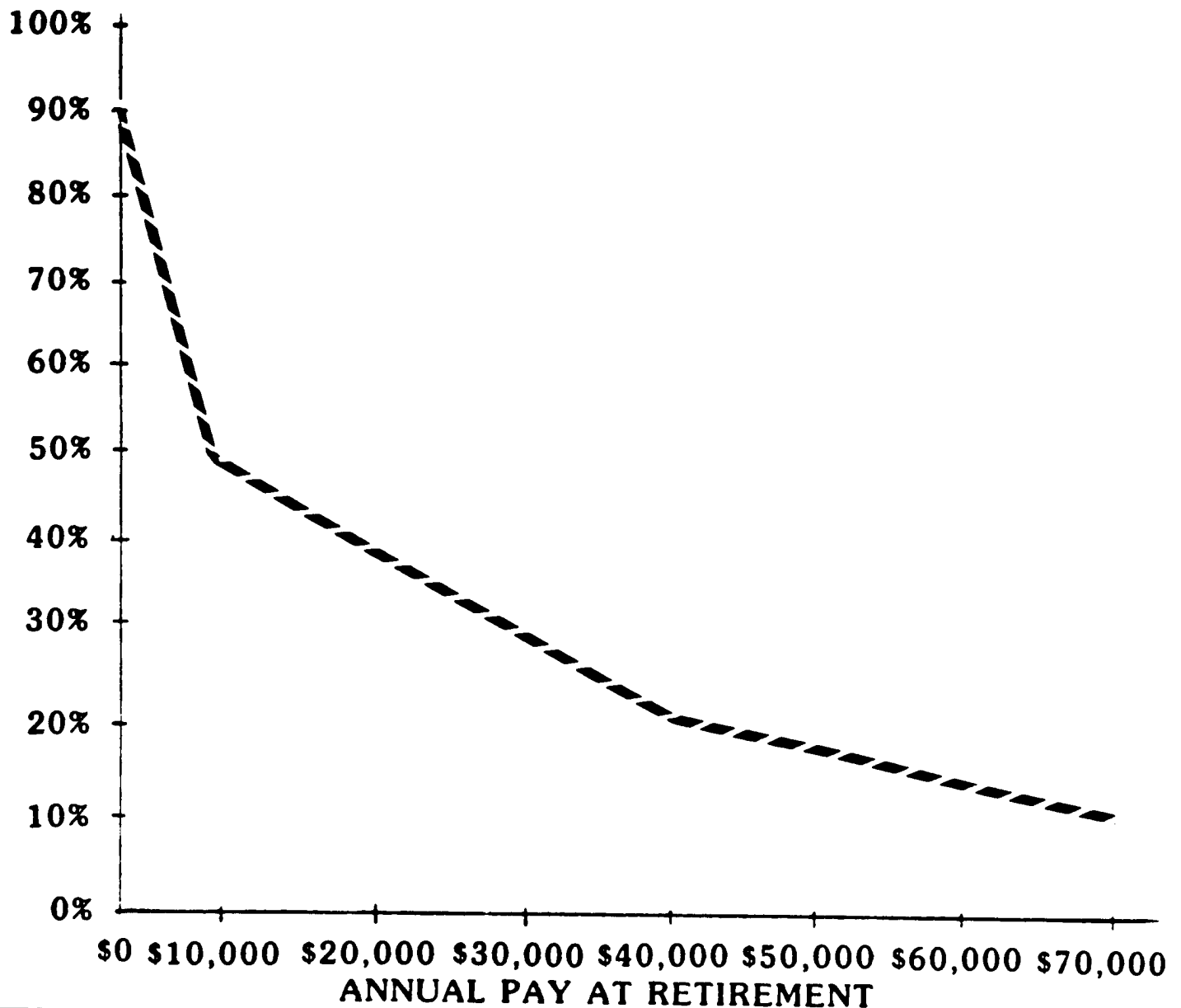
**FINAL AVERAGE SALARY**

**3 YEARS      \$37,779**

**5 YEARS      \$35,721**

**10 YEARS      \$31,207**

# SOCIAL SECURITY REPLACEMENT RATIOS



**SALARY  
AT AGE 65**

**ANNUAL PRIMARY  
SOCIAL SECURITY  
BENEFIT**

**REPLACEMENT  
RATIOS**

**\$10,000**

**\$5,028**

**50%**

**\$30,000**

**\$8,364**

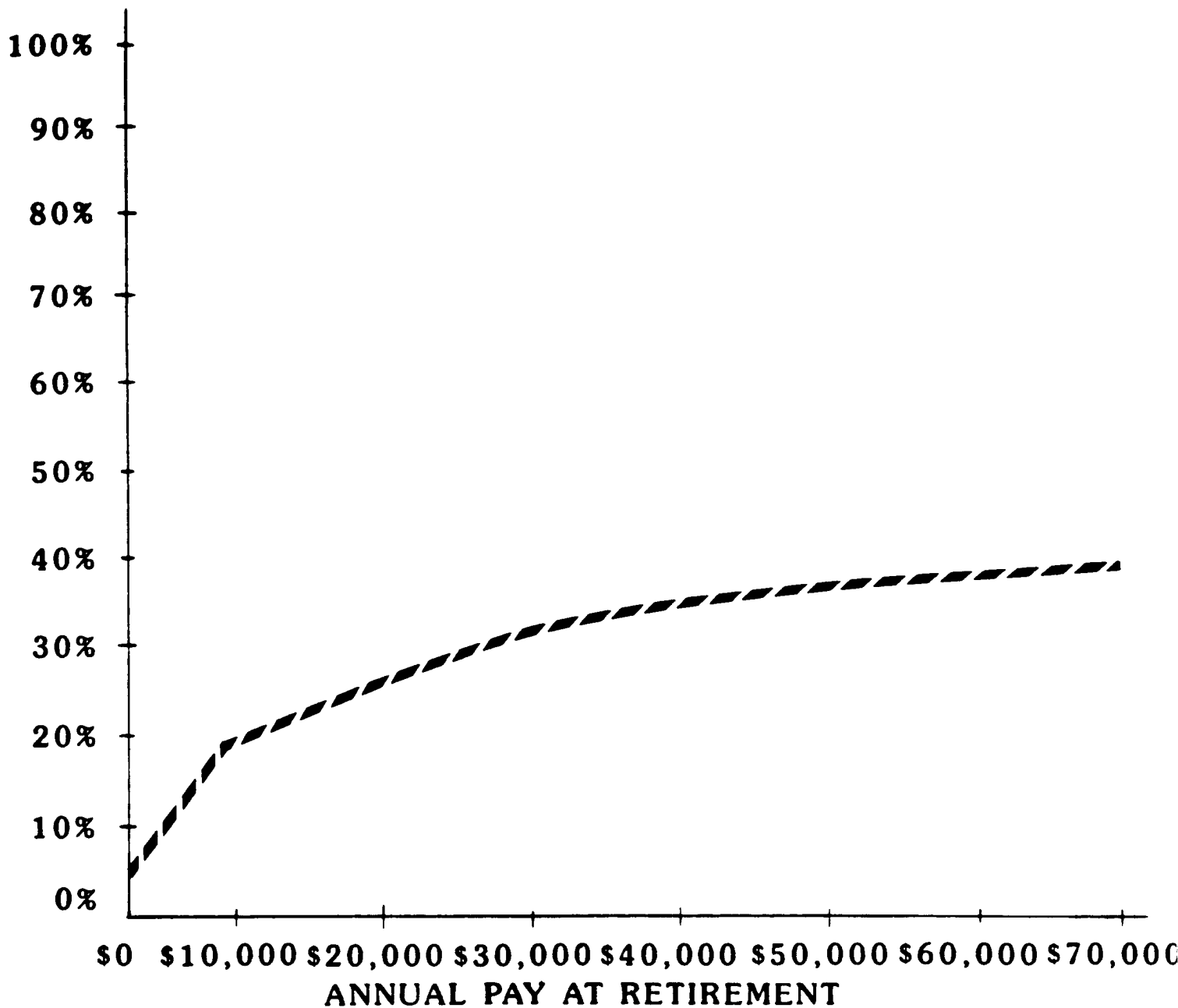
**28%**

**\$50,000**

**\$8,436**

**17%**

## PENSION REPLACEMENT RATIOS



**SALARY AT  
AGE 65**

**ANNUAL  
PENSION  
BENEFIT\***

**REPLACEMENT  
RATIOS**

**\$10,000**

**\$1,930**

**19%**

**\$30,000**

**\$9,151**

**31%**

**\$50,000**

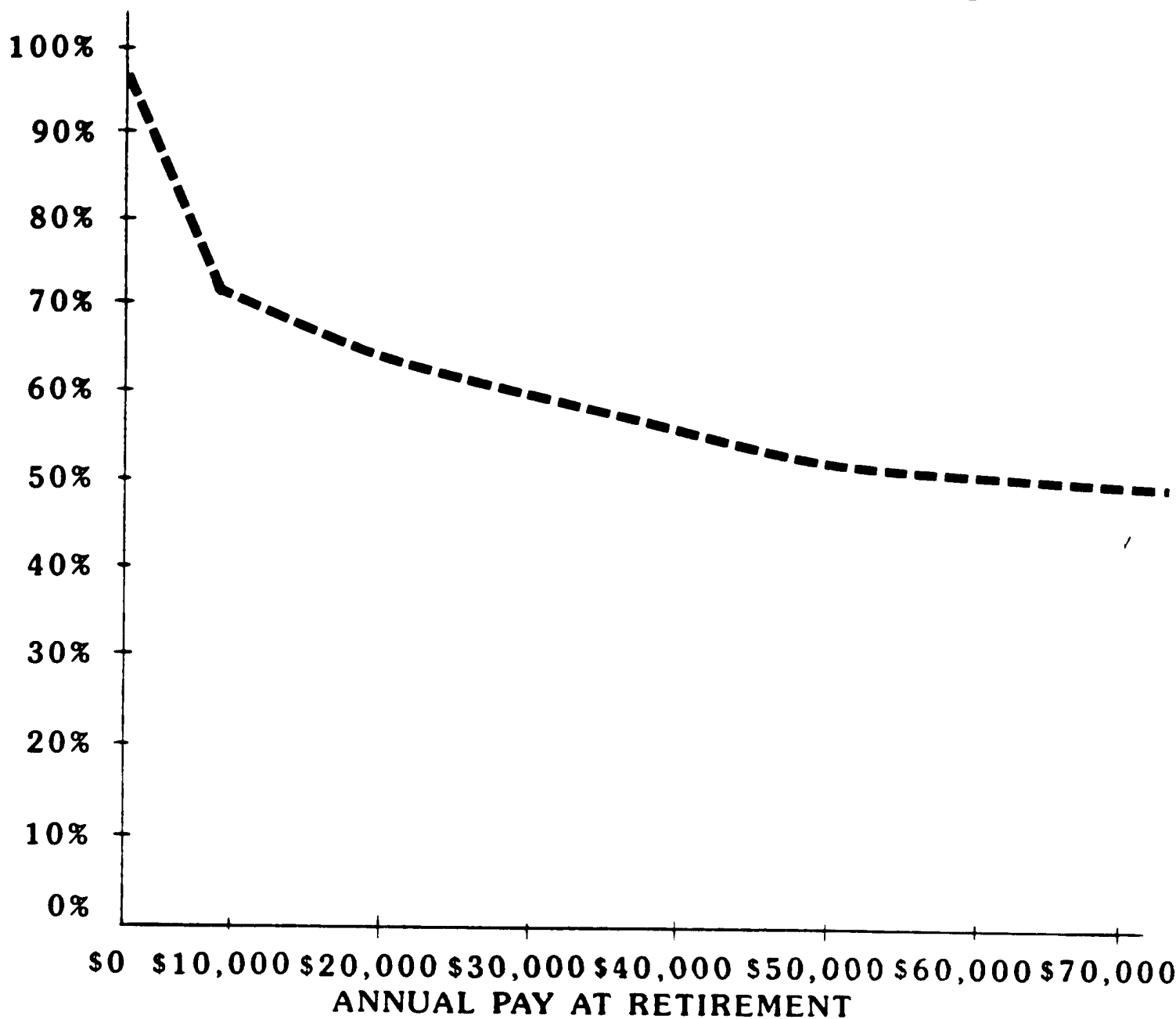
**\$18,004**

**36%**

\* 50% OF FINAL AVERAGE SALARY  
MINUS 50% OF SOCIAL SECURITY BENEFIT

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**TOTAL REPLACEMENT RATIOS**

**SALARY  
AT AGE 65**

**TOTAL  
RETIREMENT  
BENEFIT**

**REPLACEMENT  
RATIOS**

**\$10,000**

**\$6,958**

**70%**

**\$30,000**

**\$17,515**

**58%**

**\$50,000**

**\$26,440**

**53%**

RETIREMENT AGE AND PROPOSED  
NEW CIVIL SERVICE RETIREMENT PROGRAM  
By William C. Greenough\*

May I first enthusiastically commend the idea of these forums, with their greater informality and opportunity for discussion and interchange among experts and thoughtful laymen.

In discussing retirement ages, I do not plan to present data. Your committees have access to exhaustive data as to retirement ages used in various employments, and the ages at which people actually retire under Civil Service, Social Security, and other retirement plans. Our job here is to contemplate what ought to be retirement ages for the next 20 to 40 years for new employees under Civil Service, and to work toward that objective.

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The ultimate purpose of a retirement plan is to make it feasible for employees to retire in a socially acceptable manner at an appropriate age.

But this simple statement has very broad ramifications. The full objective is to achieve a productive workforce--best achieved through fair treatment of the individual workers covered by the plan, the employer, and society.

A major problem in discussing retirement ages under a proposed new Civil Service Retirement Program is the broad scope of Federal employment,

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\*Presented by William C. Greenough, Ph.D., Retired Chairman and CEO, Teachers Insurance and Annuity Association of America, College Retirement Equities Fund, July 10, 1984, at Policy Forum, Committee on Governmental Affairs, United States Senate.

the many kinds of skills, interests, experience, attitudes, vigor, and ability needed, and the competition for productive talent with private enterprise, non-profit employment, and other governmental work. Another problem is that many people approach the question of retirement age from opposite perspectives. The first is personal, introspective. Some people want to get out as early as possible--perhaps they don't like the jobs they are in, or they want a different second career, or to enjoy leisure. Others love their jobs, or are workaholics and never want to retire, or think they never grow old. Personally, I can proclaim: "At age 69 I'm as good as I ever was at age 29, or 39, or 49." But even my wife has a better memory than that. And attitudes will differ according to the physical and mental requirements and stress of a job, the attractiveness, the pay, and fringe benefits. The second is "objective," that is, "when should the other fellow retire?" "Most people are slipping by the time they are about 65 and should be retired." Or, "People age at very different rates -- there should be objective tests as to physiological age." Or, "The job requires youth and strength, so should carry a low retirement age." Or, "People ought to be allowed to work as long as they want to."

Almost all of this supports the idea of a flexible retirement age for Federal service.

During the last hundred years both our laws and our social attitudes with respect to retirement age have been increasingly skewed toward employer attitudes. Most pension plans had a compulsory retirement age, usually age 65 in private enterprise, without flexibility. Two major demographic trends gathered force during the century. The first was a trend toward more and more men (it was a century of male employment) withdrawing from the labor force at age sixty-five, or even earlier. The hundred years opened with perhaps 70% of employed people beyond age 65 staying in the labor force;

it is closing with perhaps less than 15% staying in the regular force. Precisely halfway through the hundred years Social Security was developed, partially to get the old people out of competition with the younger. At the same time that this trend was occurring, far more people--both proportionately and absolutely, were living beyond the normal retirement ages. So the number of years spent in retirement has been increasing dramatically. The retirement age in the present Civil Service Retirement Program can be considered an extreme product of this history.\* In fact, the "age 55 with no reduction in benefits after 30 years of service" will undoubtedly prove to be the nadir of the trends of the last century.

It is really great good luck that the matter of retirement ages in Federal employment must be reconsidered at this time. Monumental labor market and attitude shifts are already occurring. A major change is that just last month we reached the point at which one-half of working-age women are employed in America. A significant social change has been in attitudes toward retirement. The ADEA suddenly outlawed compulsory retirement ages under 70 in most of American employment. More and more states are uncapping retirement ages. So far, workers have not caught up with ADEA--they're still retiring earlier and earlier. But I believe the time has come when demographic, social, and economic factors will reverse the trend. Let me allude to some of the primary factors.

#### The Cost Lever:

For pensions retirement age is the most important single cost factor. It determines whether a pension will be paid for a couple (wife, about two years younger) on the average for about 22 years (age 70 retirement), 26 years (age 65 retirement), or 34 years (retirement at age 55). All of you

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\*A National Bureau of Economic Research Study shows that over half of Federal employees retire before age 60 but only 7% of private employees do.

as participants in this forum know the figures--to quote only one, it costs about twice as much to retire at 55 as at 65. Practically all of the studies on governmental retirement plans--the President's Commission on Pension Policy, the GAO, the Committee for Economic Development, The Grace Commission, various advisory commissions, and these seminars, have placed heavy emphasis on the high cost of early retirement without actuarial reduction, and have recommended change.

#### Getting The Federal Work Done:

It is now pretty generally agreed that the very early retirements taken by so many long-term Federal employees are costly not only in financial terms but also in terms of getting the government's work done, and perhaps to the feeling of usefulness of many individuals as well. Full-benefit retirements at early ages lead to a loss of experience and expertise that is difficult to replace. Turnover is expensive in itself. And the government, unlike the private sector, is losing seven to ten years of productive service between age 55 and 62 to 65. So from the standpoint of addressing the personnel needs of the Federal government, a higher retirement age would seem indicated as advantageous to individuals, the government, and the taxpayer interests.

#### Distribution of Lifetime Income:

Government compensation has not always followed the most effective or the most rational bases. Failure to take total compensation into consideration helped to lead to this. For many years, especially in the Great Depression, government employment was probably substantially underpaid. Re-compense was made, as so many studies show, by overly generous retirement arrangements, with the cost deferred. This meant that the government was forcing on its employees a lifetime distribution of their total earnings

that may not have been in their best interests. In recent years it has resulted in heavy retirements from Federal service at age 55 with 30 years of service, since there is little financial gain from staying beyond that point. Wage compression at top governmental levels and pension escalation has exacerbated the situation. This heaping up of salary income below certain ages, and annuity income beyond those same low ages, does not necessarily treat employees or the government best. A system providing appropriate pay for a longer period of employment, followed by good retirement income for a reasonable period, would seem to be much better.

#### Longevity:

Otto von Bismarck got a very good press a hundred years ago by putting in retirement benefits at age 70 in Germany (later moved to 65) for the very small number of people who lived to that age and then actually retired. A hundred years later, 28 million Americans are living beyond age 65, and the great majority of them are retiring. Hopefully improving longevity means not only longer life but longer life in good health, which once again suggests later retirements instead of earlier.

#### Multiple Wage Earners In Family:

A vast social change in the opposite direction in very recent years has been the number of women in the labor force, and of multiple-wage earners in the family. This factor alone means that many people can, if they wish, retire earlier since two incomes are supporting retirement arrangements instead of only one.

#### Youthful Employments:

During this century it has been assumed that the military, police and firemen, intelligence, and such occupations are "hazardous," and deserved very early retirement. This probably does not make much sense any more.

An increasing number of military and other such jobs call for sophisticated mechanical and electronics knowledge and ability, and other refined information. It is true that these employments may well be considered "youthful employments" on the whole. But to act as if such employees are through, are washed up, at age 38-42, and to provide generous retirement benefits for the rest of their lives is, well, a stupid way to handle it. It would be much better to provide good salaries during employment, good retirement benefits starting at age 65, and in between shift to different duties as age advances, or provide generous relocation, retraining, reeducation, and other such grants upon shifting employment.

#### Flexible Work Arrangements:

Perhaps the Federal Government has an especially challenging opportunity to point the way for employment in America. It has already eliminated mandatory retirement for its own employees, but has made little attempt to change its own job structure. Job patterns are incredibly frozen--nine to five, five days a week, fifty weeks a year, or whatever the particular pattern is. Seniority, union rules, employer regulation, all prevent flexibility. Under such rigidity of course people burn out, get bored, get fed up. Perhaps the Federal Government should lead us toward flexible work arrangements through restructuring jobs for people above certain ages. This could include tapering off, shift to part-time or flexible hours, retraining, different work assignments above age 45, 55, 60, modem connections to home computers, and perhaps even a coming to grips with tapering off of earnings as well as duties. This is not an easy area in which governments can innovate. But as the opportunity to work gets pushed up and up to higher ages under ADEA, etc., changes must be introduced.

Later Retirement Ages:

Practically all of the factors suggest, for the coming 20 to 50 years, a higher and more flexible retirement age for participants in the new Federal Civil Service Retirement Plan. I believe this will be in the interest of the employees, the Federal Government, and society. I believe it will be in the main stream of development of employment patterns, utilization of the skills of older workers, and the social thrust as indicated by ADEA and trends in private retirement ages. And it fits with the demographics of baby booms, dependency ratios, and financing of retirements.

This conclusion is consistent with a preponderance of current recommendations on retirement ages. References would include a number of studies by the President's Commission on Pension Policy, the National Bureau of Economic Research, the Aspen Institute's Quiet Crisis of Public Pension Plans, the ADEA itself, discussions before these Committee Forums, testimony in Congress, various business group recommendations, and Social Security advisory committees. The concurrence is substantial.

One quote can summarize much of the foregoing. The Committee for Economic Development, in its Reforming Retirement Policies, published in the Fall of 1981, said (page 45):

"It is time for both employers and employees to reconsider their attitudes toward early retirement. Elimination of full-benefit or heavily subsidized retirement at early ages and gradual upward movement of normal retirement ages would help to reverse the current trend toward earlier retirement. Worries about the inroads made by inflation during long periods of retirement also seem to be giving workers second thoughts about early retirement. A shift toward



later retirement would enable employer and employee contributions to employer pension plans to raise the general level of annual retirement income to be received at normal retirement ages. But employment patterns will also have to shift if the traditional retirement age rises. Just as the American economy has been able to accommodate, and benefit from, an enormous increase in the employment of women, it can also benefit from an increase in the employment of people over age 60 or even 65. This will require more flexible work assignments, including part-time, temporary, flexible-hour, and seasonal work arrangements and job sharing with younger part-time workers."

... (The CEP) "also believes that government-employer plans have misused early retirement provisions at heavy expense to taxpayers, frequently deferring that expense to future generations of taxpayers. We believe early retirement under all public plans should generally be at actuarially reduced benefits."

Just as employers must become more flexible in work arrangements, employees must take responsibility on themselves to avoid physical and intellectual obsolescence if they are to be ready to shift job assignments and patterns at older ages.

#### Conclusion:

If this forum in 1984 were taking up the question of retirement ages without any historical background at all, I would hazard a guess that it would recommend a normal retirement age for civil service of somewhere between age 68 and 72. This age would fit with demographic facts, with improvements in longevity, with the social philosophy of ADEA, with the realities of

governmental employment, and with financing practicalities. But while we should not be a victim of our history, we do need to take account of it. Hence, perhaps a more acceptable arrangement would be to make no change in retirement age for present members of the Retirement System, and to choose, for new members, age 65 as normal retirement age, moving upward in tandem with Social Security.

Coordination Between Plan Retirement Age and Plan Design:

One can't really discuss retirement ages without also briefly discussing plan design.

In order to achieve the objectives suggested for the future, a three-layer plan like the ones under primary discussion in these seminars would seem to be fair, flexible, useful, and appropriate, even if a bit complex. The required parts of the three plans could be designed to provide, for new federal employees, the appropriate level of benefits at 65, which would be considered the normal retirement age. There would be no restrictions on when employees could start their benefits, once vesting occurred. For retirements below the normal age, all benefits would be actuarially equivalent to the age 65 benefit. For retirements after that age, full accruals of benefits would be provided under the defined contribution component; no additional accruals would be provided under the defined benefit portion, and the social security portion would follow the standard social security formulas. This pattern would give ample incentive for people who wanted to work to continue after age 65.

Recommendations:

Thus, the retirement ages and benefit plans could look generally like the following, with any specific details open for discussion:

1. Social Security would be the first level of benefits,

with its early retirement age of 62, its normal age of

65, and with a gradual upward movement of the retirement ages under the 1983 Social Security Act.

2. A second layer of Federal Civil Service Retirement benefit would be provided by a modest defined benefit plan paid for by employer contributions only. Full formula benefits would be available at normal retirement age of 65, reflecting all years of service. Benefits would be actuarially reduced for early retirement. There would be no accrual of benefits above age 65, except for increases reflecting salary changes.
3. The third layer would be a defined contribution plan paid for by employer and employee contributions, designed to bring benefits up to the appropriate target level at age 65. Employer contributions would cease at age 65.

Voluntary Supplements:

With the flexible retirement ages recommended above, flexibility should also be permitted in retirement savings. The defined contribution plan provided above is an excellent mechanism for this. It can allow an employee maximum opportunity to make his own decisions as to allocating part of his lifetime earnings between preretirement and postretirement income. If he wishes to retire quite early, he would make maximum contributions to the voluntary part of the plan. If he wished to retire later on a generous income, he would do the same. If he wished to retire earlier or later but with less generous retirement income, he would make little or no voluntary contributions.

A specific suggestion would be a voluntary plan with the government matching, one for two, the amount saved by the individual, up to a government maximum contribution of three percent of salary but no limit on employee contributions.

One additional thing is needed. Federal employees should have the ability to defer taxes on both their required and their voluntary annuity contributions up to the same limit as available to certain private employees.

I believe this is the direction in which the discussions as to a Civil Service Retirement Plan for new employees after January 1st, 1985, are moving. It allows all present employees to continue on to their eventual retirement without change in the rules of the game. (By the way, careful consideration should be given to allowing all persons under, say, age 45 to choose either to stay in the present Civil Service Plan or shift to the new one.) And it provides for all new employees a very different but much more currently appropriate plan with maximum flexibility, as is socially required now, both in their choice of a retirement date and in their level of savings for retirement income.

Retirement Age Recommendations:

No Change for present civil service employees.

For New Employees:

1. Normal retirement with full benefits at age 65, moving upward in tandem with Social Security.
2. For retirement before age 65, actuarially reduced benefits that can start at any age after vesting occurs.
3. For retirement after age 65, regular Social Security increases, no further benefit increases except those related to salary increases for the defined benefit portion, and regular actuarial increases without any further employer contributions for the defined contribution plan.

William C. Greenough